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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/523,815	02/04/2005	Toshimitsu Kohara	265125US2PCT	4231

22850 7590 05/11/2009

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EXAMINER	
BERMAN, JASON	

ART UNIT	PAPER NUMBER
1795	

NOTIFICATION DATE	DELIVERY MODE
05/11/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Advisory Action Before the Filing of an Appeal Brief	Application No.	Applicant(s)	
	10/523,815	KOHARA ET AL.	
	Examiner	Art Unit	
	Jason M. Berman	1795	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 30 April 2009 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:
   a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.
   b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.
   Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
   (a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
   (b) ☐ They raise the issue of new matter (see NOTE below);
   (c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
   (d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.
   NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).
4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicant's reply has overcome the following rejection(s): _____.
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
   The status of the claim(s) is (or will be) as follows:
   Claim(s) allowed: *none*.
   Claim(s) objected to: *none*.
   Claim(s) rejected: *21-29*.
   Claim(s) withdrawn from consideration: *none*.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: See Continuation Sheet.
12. ☐ Note the attached Information *Disclosure Statement*(s). (PTO/SB/08) Paper No(s). _____
13. ☐ Other: _____.

/Nam X Nguyen/
Supervisory Patent Examiner, Art Unit 1753

Continuation of 11. does NOT place the application in condition for allowance because: Applicant argues on pages 4-6 of the remarks that it would not have been obvious to one of ordinary skill in the art to perform a two step process of forming an alpha-alumina structure by sputtering in view of Zywitski. This argument is not found persuasive. Zywitski discloses the formation of alpha-alumina at different substrate temperatures (figure 4). Although the experiment of Zywitski is presented as data points on a graph, rather than a two step process as claimed, one of ordinary skill in the art would recognize that because alpha-alumina can be effectively formed at different temperatures (as disclosed by Zywitski) and the properties of the alpha-alumina vary depending on the temperature of formation (as disclosed by Zywitski at figures 4 [hardness] and 5 [residual stress]), it would be obvious to form alpha-alumina under changing conditions, the conditions including temperature, in order to form an alpha-alumina layer with the desired properties (including hardness and residual stress).
A similar argument is made in the remarks on pages 6-7 with respect to Sproul's disclosure of data points illustrating the relationship between substrate current density and deposition rate. Although Sproul does not explicitly disclose a two step process as claimed in the instant application, it would be obvious to one of ordinary skill, in view of the disclosure of Sproul, that substrate current density can be varied, as disclosed by the data points of Sproul, in order to obtain the desired effect in the sputtering operation.

Applicant argues on pages 8-9 of the remarks that the Fu reference is not applicable to the instant application because the method of Fu is directed towards TiN production, rather than alumina production. While the exemplery method of Fu is producing TiN, Fu recognizes that the reactive sputtering process can involve a nitride, such as TiN or an oxide, such as alumina (col 1 lines 28-31). One of ordinary skill would recognize that the poisoning of a target and adjustment of parameters would be similary between these alternative reactive sputtering operations. As to applicant's arguments that Fu does not disclose the operation of the target in a poisoning mode followed by metallic mode, one of ordinary skill would recognize that by beginning the process in poisoning mode (col 12 lines 16-17) followed by a ramp down in the pressure (figure 17, poisoning 202) would require a subsequent ramp up in pressure towards metallic mode (as shown in figure 17 to continue the sputtering process.